



#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Marcellin, et al.

DOCKET NO.: 122170.00002US

SERIAL NO.: 10/534,620

CONFIRMATION NO. 7448

FILED: 05/11/2005

ART UNIT: 2624

TITLE: METHODS FOR DECODING CORRUPT JPEG2000 CODESTREAMS

Mail Stop OIPE - Corrected Filing Receipts

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Gavin J. Milczarek-Desai

Quarles & Brady Streich Lang

One South Church Ave., Suite 1700

Tucson, AZ 85701

#### **CERTIFICATE OF MAILING**

I hereby certify that on this <u>7th</u> day of July, 2006, this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Mail Stop OIPE - Corrected Filing Receipts, Commissioner for Patents, P.O. Bex 1450, Alexandria, VA 22313-1450.

Katherine C. Maas

#### REQUEST FOR CORRECTION OF FILING RECEIPT

Dear Sir:

The Filing Receipt issued for the above-referenced application is incorrect. Please correct the title on the Filing Receipt to: **Methods for decoding corrupt jpeg2000 codestreams**.

A marked copy of the Filing Receipt is provided with the appropriate change noted thereon, as requested. Support for this correction can be found in the parent application PCT/US2003/036213. Also enclosed is a copy of the first page of WO 2004/047010 A1, the published PCT application.

Thank you for your attention and cooperation.

Respectfully submitted,

Gavin J. Milczarek-Desai

Reg. No. 45,801

(520) 770-8716 phone; (520) 770-2235 fax



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS FO. Box 1459 Alexandra, Virginia 22313-1450 www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/534,620	05/11/2005	2624	925	122170.00002US	17	29	7

**CONFIRMATION NO. 7448** 

CORRECTED FILING RECEIPT

\*OC000000019413007\*

34282 QUARLES & BRADY STREICH LANG, LLP ONE SOUTH CHURCH AVENUE SUITE 1700 TUCSON, AZ 85701-1621

Date Mailed: 06/27/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

#### Applicant(s)

Michael W Marcellin, Tucson, AZ; Ali Bilgin, Tucson, AZ; Zhenyu Wu, Tucson, AZ;

Power of Attorney: The patent practitioners associated with Customer Number 34282.

#### Domestic Priority data as claimed by applicant

This application is a 371 of PCT/US03/36213 11/15/2003 which claims benefit of 60/426,830 11/15/2002

#### Foreign Applications

If Required, Foreign Filing License Granted: 06/27/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US10/534,620

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*



Title

Jpeg 20∞ Methods for decoding corrupt <del>jpeg2000</del> codestreams

**Preliminary Class** 

382

#### PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

# LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

#### **GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof

unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

#### **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

#### (19) World Intellectual Property Organization

International Bureau



### 

(43) International Publication Date 3 June 2004 (03.06.2004)

#### PCT

## (10) International Publication Number WO 2004/047010 A1

- (51) International Patent Classification7: G06K 9/36, 9/40
- (21) International Application Number:

PCT/US2003/036213

(22) International Filing Date:

15 November 2003 (15.11.2003)

(25) Filing Language:

English

(26) Publication Language:

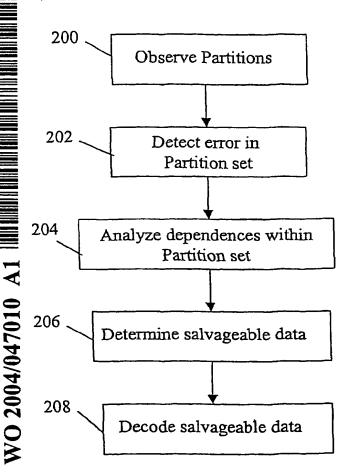
English

- (30) Priority Data: 60/426,830 15 November 2002 (15.11.2002) US
- (71) Applicant (for all designated States except US): THE ARIZONA BOARD OF REGENTS on behalf of THE UNIVERSITY OF ARIZONA [US/US]; 888 N. Euclid Avenue, Room 204, P.O. Box 210158, Tucson, AZ 85721-0158 (US).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MARCELLIN, Michael, W. [US/US]; 6535 N. Camino de Michael, Tucson, AZ 85718 (US). BILGIN, Ali [TR/US]; 1300 E. Ft. Lowell Rd., Apt. M-215, Tucson, AZ 85719 (US). WU, Zhenyu [CN/US]; 951 E. 10th Street, Apt. 22, Tucson, AZ 85719 (US).
- (74) Agent: MILCZAREK-DESAI, Gavin, J.; Quarles & Brady Streich Lang, One South Church Avenue, Suite 1700, Tucson, AZ 85701-1621 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

#### (54) Title: METHODS FOR DECODING CORRUPT JPEG2000 CODESTREAMS



(57) Abstract: The present invention provides a method for decoding corrupt codestreams for encoded digital imagery and video and, in particular, JPEG2000 codestreams with improved error resilience properties. The decoding techniques apply to a class of coding algorithms in which the data from underlying images are partitioned, typically to allow decoding of different spatial sections of the image, and the rules governing the dependencies within and perhaps between partitioned sets are known. Corrupt codestreams are decoded with improved image quality by observing the partitions imposed by the underlying algorithm (200), detecting an error in a partition set (202), analyzing the dependencies within and perhaps between the partitions (204), determining what sections of encoded data that follow the error in the partition set can be salvaged (206), and decoding those sections (208). Even though there might be errors in a particular partition, portions of that partition might still be completely or partially decodable, depending on certain modes or "switches" used during the creation of the codestream.